

**Entering the List Editor**

1. Turn on Calculator.
2. Press the key to get to the Edit Menu.
3. Press  to get to the lists. You should see a screen similar to the following. With L1 being the first list present.

**\*If L1 is not there or it is inadvertently deleted**. Go back to the EDIT menu by pressing and select 5:SetUpEditor by pressing  and then . This should reenter the lists.

**Clearing a List Out.**

If there is data already present in L1 it will need to be cleared before you begin. Use the arrow keys to put the cursor on the very top of L1, so that it is highlighted. Then press Border and Border. **DO NOT PRESS** Border**!! If you do, go to #3 to get the list back.**

**Entering Data into a List**

1. Using the arrow keys move the cursor so that the cell under L1 is highlighted.
2. Enter the following data into L1 by typing the number and hitting .

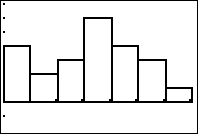
43 52 38 42 46 26 38 38 31 38 37 38

48 45 27 47 35 35 26 47 24 21 32



1. There are 23 data values. The last time you hit enter you should have the following screen. The cell below the last number is highlighted and reads “L1(24) =” meaning the 24 value is blank and you have entered 23 data values.

**Creating a Histogram**

1. Press Border and make sure all formulas are blank. If not just highlight the Y= and hit Border
2. Press Border and thenBorder to access the STAT PLOT menu. Check that the three Plots all say Off. If not press BorderBorder.
3. In the STAT PLOT menu select Plot1 by pressing Border
4. Highlight On and press Border to turn on the plot.
5. Press the Down Arrow key to get to the Type. Press the Right Arrow key twice so that the histogram picture is highlighted and pressBorder.
6. Press Down to get to the Xlist. Press BorderBorderBorder to reference L1. Your screen should look exactly like the following.
7. The calculator can automatically create an appropriate window for viewing. To do this press the Borderkey. From the ZOOM Menu select #9:ZoomStat by using the arrow keys and hitting Border or just press Border. You should have the following graph:
8. To find the proper scale and frequency of each bin press the Border key. The graph should look like the one below:

Here the calculator has started the first bin at 21 and up 26 1/6. This would have a Bin Width = 26 1/6 – 21 = 5 1/6. The first bin has a frequency of 4.

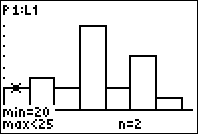
1. Use the Right and Left Arrow keys to move between the different bins to find the information on each bin.
2. A bin width of 5 1/6 is somewhat awkward to deal with. This should usually only be a starting point for your histogram. You can manipulate the features of the histogram very easily.
3. Press the Borderkey to access the Window Menu. You should see the following screen.
4. Change the Xscl to 5. To look at the graph press Border Your graph should look like the one below.



1. Change the Xmin to 20. Your graph should now look like the one below.



As you can see the one bin goes higher than the screen. Go back to the Window Menu and change the Ymax to 10. Hit the Border key.



**PRACTICE**

1. Clear out the data in L1.
2. Enter the following data:

17 11 12 6 7 18 13 19 23 17 4 9 13 8 19 11

9 21 28 12 4 0 9 18 28 29 12 16 19 9 21 3

8 11 17

1. Create the histogram and let the calculator set the window.
   1. What does the first bin start with?
   2. What does the last bin finish with?
   3. What is the bin width?
   4. What bin has the most observations? How many?
   5. What bin has the smallest number of observations? How many?
   6. Trace the histogram below.
2. Change the bin width to 4 and copy the histogram below.
   1. What does the first bin start with?
   2. What does the last bin finish with?
   3. What bin has the most observations? How many?
   4. What bin has the smallest number of observations? How many?

* 1. What differences do you see between the original histogram and the new histogram?
  2. What similarities do you see between the original histogram and the new histogram?

1. Change the bin width to a number of your choice. Copy the histogram below.